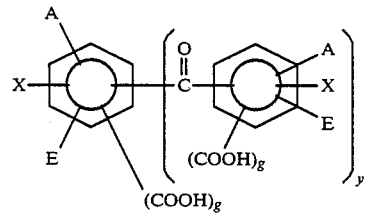

where:

g=0 to 7, preferably 2;

E is a polymerizable moiety:

$$CH_2=-(-COO-(-CH(CH_2)_jH)_q-(CHOH)_m-(CH_2-)_pOCO-(-C-(-CH_2)_rH)$$

wherein

r=0 or 1, preferably 1;

p=0 to 12, preferably 1;

m=0 to 6, preferably 0;

q=0 to 2, preferably 1;

j=0 or 1, preferably 0;

p+m+q=2 to 20, preferably 2;

the number of E groups per molecule is 1 to 8, preferably 2;

A is an anhydride group —OCOCO— (attached to vicinal ring carbon atoms); the number of A groups per molecule is 0 to 1, preferably 0 or 1;

X is a halide group; and the number of X groups per molecule is 0 to 8, preferably 0; and

y is 0 to 1, preferably 0.

It should be understood that the foregoing disclosure emphasizes certain specific embodiments of the invention and that all modifications or alternatives equivalent thereto are within the spirit or scope of the invention as set forth in the appended claims.

What is claimed is:

1. A method for preparing the surface of dentin or enamel for adhesion of composite materials or resins, which method comprises:

(a) contacting with the surface of the dentin or enamel an aqueous solution comprising at least one acidic salt containing a polyvalent cation which is capable of changing valence by unit steps and which can bind to dentin or enamel surface sites, and at least one anion which forms a relatively water-insoluble precipitate or precipitates with calcium and which contains at least one carboxyl group;

(b) contacting with the surface of the dentin or enamel a solution comprising N-phenylglycine in a solvent; and

(c) contacting with the surface of the dentin or enamel a solution comprising at least one compound selected from the group consisting of (1) the addition reaction product of pyromellitic acid dianhydride and 2-hydroxyethyl methacrylate, (2) the addition reaction product of 3,3',4,4'-benzophenonetetracarboxylic dianhydride and 2-hydroxyethyl methacrylate, and (3) 4-methacryloxyethyltrimellitic anhydride.

2. A method as in claim **1** wherein the concentration of the acidic salt solution is from about 0.1% to a saturated solution.

3. A method as in claim **1** wherein the cation of the acidic salt forms a relatively insoluble phosphate.

4. A method as in claim **1** wherein the acidic salt is ferric oxalate.

5. A method as in claim **1** wherein the acidic salt is ferric citrate.

6. A method as in claim **1** wherein the concentration of the solution comprising N-phenylglycine in a solvent is from about 0.1% to a saturated solution.

7. A method as in claim **1** wherein the concentration of the solution comprising at least one compound selected from the group consisting of (1) the addition reaction product of pyromellitic acid dianhydride and 2-hydroxyethyl methacrylate, (2) the addition reaction product of 3,3',4,4'-benzophenonetetracarboxylic dianhydride and 2-hydroxyethyl methacrylate, and (3) 4-methacryloxyethyltrimellitic anhydride is from about 0.1% to a saturated solution.

8. A method as in claim **1** wherein the solvent for the solution of subpart (b) is acetone.

9. A method as in claim **1** wherein the solvent for the solution of subpart (c) is acetone.

10. A method as in claim **1** wherein the steps (a), (b) and (c) are performed in that order.

11. A method as in claim **1** wherein the surface is exposed to ultraviolet, visible light, or infrared radiation before or after the surface is contacted with the composite material, resin, surface coating, monomer, prepolymer, or plastic.

12. A method for preparing the surface of dentin or enamel for adhesion of composite materials or resins, which method comprises:

(a) contacting the surface of the dentin or enamel with an aqueous solution comprising ferric oxalate;

(b) washing and then drying the surface of the dentin or enamel;

(c) contacting the surface of the dentin or enamel with a first acetone solution comprising N-phenylglycine in acetone;

(d) removing any excess of the first acetone solution and rinsing the surface of the dentin or enamel with acetone, removing any excess acetone and drying the surface;

(e) contacting the surface of the dentin or enamel with a second acetone solution comprising at least one compound selected from the group consisting of (1) the addition reaction product of pyromellitic acid dianhydride and 2-hydroxyethyl methacrylate and (2) the addition reaction product of 3,3',4,4'-benzophenonetetracarboxylic dianhydride and 2-hydroxyethyl methacrylate.

13. A method as in claim **12** wherein the concentration of the aqueous solution comprising ferric oxalate is about 6.8% of the hexahydrate.

14. A method as in claim **12** wherein the concentration of the aqueous solution comprising ferric oxalate is about 4% of the hexahydrate.

15. A method as in claim **12** wherein the washing medium is water.

16. A method as in claim **12** wherein the concentration of the first acetone solution is about 10% of the N-phenylglycine in acetone.

17. A method as in claim **12** wherein the compound in the second acetone solution is the addition reaction product of pyromellitic acid dianhydride and 2-hydroxyethyl methacrylate.

18. A method as in claim **17** wherein the concentration of the compound in the second acetone solution is about 5%.